



1776 East 17th Street  
Cleveland, Ohio 44114



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**PAID**  
PERMIT NO. 1001

MR. TED NELSON  
BOX 1546  
POUGHKEEPSE, N.Y. 12603

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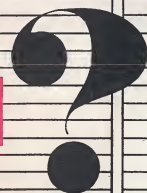
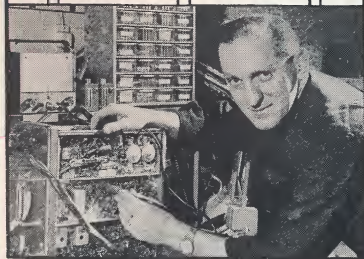
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RETURN REQUESTED



# WHERE WILL YOU BE AFTER 5 MORE YEARS OF THE AMAZING ELECTRONICS REVOLUTION



**"on the outside looking in"...or  
on the inside with a secure  
high-paying job**







*Save up to \$40.00! Enroll before June 30!*

**CIE**

**Cleveland Institute of Electronics**

1776 East 17th Street • Cleveland, Ohio 44114

## Application For Enrollment

MR. TED NELSON  
BOX 1546  
POUGHKEEPSE, N.Y. 12603  
2 1 06

I hereby make application for the Course indicated. The provisions of this application, together with information contained in current literature, shall constitute an agreement between me and the Institute. If this application is not accepted, all funds remitted will be promptly returned to me.

*Attach  
Course  
Discount  
Stamp  
Here*

Is your address correct?

Date of birth \_\_\_\_\_ mo. \_\_\_\_\_ day \_\_\_\_\_ year Education (Circle highest grade completed) 9 10 11 12 College 1 2 3 4

Present occupation \_\_\_\_\_ Employer \_\_\_\_\_

Have you had any schooling or employment in radio or electronics? Yes ☐ No ☐ Indicate radio or electronics courses taken:

Name of school \_\_\_\_\_ Course \_\_\_\_\_

How did you learn about Cleveland Institute of Electronics? (Please give name of magazine, student training representative, or other source.)

### CIE COURSES (Please see other side for course descriptions)

### TUITION SCHEDULE

513

Check COURSE and PAYMENT PLAN desired

|                                                                                                  | PLAN A<br>(Payment in full)                                     | PLAN B<br>(Monthly payment)                                                                                    | PLAN C<br>(Monthly payment)                                                                                    |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> <b>ELECTRONICS TECHNOLOGY</b><br><i>(Save \$30.00)</i>                  | <input type="checkbox"/> <del>\$295.00</del><br><b>\$265.00</b> | <input type="checkbox"/> \$25.00 down and \$17.50 per month until I pay <del>\$325.00</del><br><b>\$295.00</b> | <input type="checkbox"/> \$17.50 down and \$15.00 per month until I pay <del>\$355.00</del><br><b>\$325.00</b> |
| <input type="checkbox"/> <b>BROADCAST ENGINEERING</b><br><i>(Save \$30.00)</i>                   | <input type="checkbox"/> <del>\$295.00</del><br><b>\$265.00</b> | <input type="checkbox"/> \$25.00 down and \$17.50 per month until I pay <del>\$325.00</del><br><b>\$295.00</b> | <input type="checkbox"/> \$17.50 down and \$15.00 per month until I pay <del>\$355.00</del><br><b>\$325.00</b> |
| <input type="checkbox"/> <b>FIRST-CLASS FCC LICENSE</b><br><i>(Save \$20.00)</i>                 | <input type="checkbox"/> <del>\$270.00</del><br><b>\$250.00</b> | <input type="checkbox"/> \$25.00 down and \$17.50 per month until I pay <del>\$295.00</del><br><b>\$275.00</b> | <input type="checkbox"/> \$17.50 down and \$15.00 per month until I pay <del>\$325.00</del><br><b>\$305.00</b> |
| <input type="checkbox"/> <b>ELECTRONIC COMMUNICATIONS</b><br><i>(Save \$20.00)</i>               | <input type="checkbox"/> <del>\$270.00</del><br><b>\$250.00</b> | <input type="checkbox"/> \$25.00 down and \$17.50 per month until I pay <del>\$295.00</del><br><b>\$275.00</b> | <input type="checkbox"/> \$17.50 down and \$15.00 per month until I pay <del>\$325.00</del><br><b>\$305.00</b> |
| <input type="checkbox"/> <b>INDUSTRIAL ELECTRONICS &amp; AUTOMATION</b><br><i>(Save \$25.00)</i> | <input type="checkbox"/> <del>\$280.00</del><br><b>\$255.00</b> | <input type="checkbox"/> \$25.00 down and \$17.50 per month until I pay <del>\$310.00</del><br><b>\$285.00</b> | <input type="checkbox"/> \$17.50 down and \$15.00 per month until I pay <del>\$340.00</del><br><b>\$315.00</b> |
| <input type="checkbox"/> <b>ADVANCED COMMUNICATIONS ENGINEERING</b><br><i>(Save \$40.00)</i>     | <input type="checkbox"/> <del>\$385.00</del><br><b>\$345.00</b> | <input type="checkbox"/> \$25.00 down and \$17.50 per month until I pay <del>\$425.00</del><br><b>\$385.00</b> | <input type="checkbox"/> \$17.50 down and \$15.00 per month until I pay <del>\$465.00</del><br><b>\$425.00</b> |

Enclosed is \$\_\_\_\_\_ as called for by the payment plan I have checked above. Your first set of lessons will be sent parcel post, special handling. If air mail service for this shipment is desired, check here ☐ and add \$2.40 to your payment.

I have read and understand the above information and the Rights and Obligations section (on the other side) which is a part of this agreement

\_\_\_\_\_  
(Sign Here) Date

For your protection make all payments by check, money order or bank draft. If you have to send cash—use Registered Mail.



Accredited by the Accrediting Commission of the National Home Study Council.

The Accrediting Commission has been approved by the U. S. Office of Education as a "nationally recognized accrediting agency."

*For Special Rates - enroll before June 30, 1966*

Accepted by \_\_\_\_\_  
(Registrar)

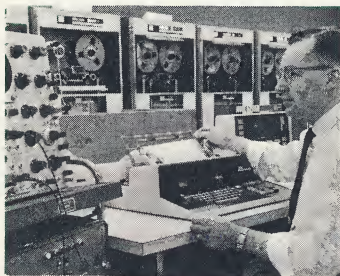
Student Number \_\_\_\_\_



# HOW YOU CAN SUCCEED IN ELECTRONICS

...Select your future from Six Career Programs

## ELECTRONICS TECHNOLOGY



**COURSE CONTENTS:** 66 lessons.  
A comprehensive program in electronics theory and mathematics covering Automation, Communications, Computers, Industrial Controls, Television, Transistors, Troubleshooting and preparation for 1st Class FCC License.

**SUGGESTED RATE OF PROGRESS:**  
One lesson per week — total, 66 weeks.

**COMPLETION TIME ALLOWED:**  
30 months.

## BROADCAST ENGINEERING

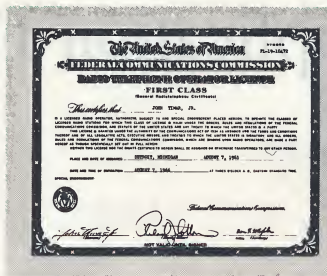


**COURSE CONTENTS:** 64 lessons.  
An excellent program in studio engineering covering Transcription and Reproduction Equipment, Program Transmission, Broadcast Transmitters and 1st Class FCC License preparation.

**SUGGESTED RATE OF PROGRESS:**  
One lesson per week — total, 64 weeks.

**COMPLETION TIME ALLOWED:**  
27 months.

## FIRST-CLASS FCC LICENSE



**COURSE CONTENTS:** 36 lessons.  
A streamlined program in preparation for a 1st Class FCC License enabling you to operate and maintain aviation, broadcasting, marine, microwave, or mobile transmitting equipment.

**SUGGESTED RATE OF PROGRESS:**  
One lesson per week — total, 36 weeks.

**COMPLETION TIME ALLOWED:**  
24 months.

## ELECTRONIC COMMUNICATIONS



**COURSE CONTENTS:** 39 lessons.  
A specialized course in communications leading to a 2nd Class FCC License with Microwave, Mobile Radio, Frequency Modulation, Transistors and Troubleshooting.

**SUGGESTED RATE OF PROGRESS:**  
One lesson per week — total, 39 weeks.

**COMPLETION TIME ALLOWED:**  
21 months.

## INDUSTRIAL ELECTRONICS & AUTOMATION



**COURSE CONTENTS:** 51 lessons.  
This program emphasizes Industrial Electronics and Automation including such important subjects as Computers, Electronic Heating and Welding, Industrial Controls, Industrial Television, Servomechanisms and Solid State Devices.

**SUGGESTED RATE OF PROGRESS:**  
One lesson per week — total, 51 weeks.

**COMPLETION TIME ALLOWED:**  
24 months.

## ADVANCED COMMUNICATIONS ENGINEERING



**COURSE CONTENTS:** 75 lessons.  
A college-level engineering program on Communication Mathematics; AC and DC Theory; Communication Networks, Bilateral Circuits and Network Analysis; Magnetic Circuit and Radiation Propagation Phenomena; and Radio Components and Systems.

**SUGGESTED RATE OF PROGRESS:**  
One lesson per week — total, 75 weeks.

**COMPLETION TIME ALLOWED:**  
36 months.

## RIGHTS and OBLIGATIONS

1. The Institute will assign instructors to be available at all times during the term of this agreement for consultation, grading of examinations, advice and comment.
2. Lesson units will be supplied to you as fast as you study. If you anticipate a rapid rate of study, your request for advance lessons will be given prompt action.
3. You may use the Job Opportunities Services at any time during the effective period of this agreement. After graduation you will be entitled to lifetime job placement service.
4. If tuition is to be remitted in monthly installments, all payments must be made when due. The rate of training progress will not affect this obligation.
5. Upon successful completion of your course, you will be awarded a Diploma.
6. This agreement may be cancelled by you in accordance with the rules of the Accrediting Commission of the National Home Study Council by written request to the Institute.
7. You will have a period of ten days in which to examine and use your training material. If you feel the course selected is in any way unsatisfactory, you may return the material and the Institute will make a full refund of all payments.

## FCC LICENSE WARRANTY

Completion of Electronics Technology, Broadcast Engineering, or the First-Class FCC License training program will prepare you for a First Class Commercial Radio Telephone License (with Radar Endorsement). Should you fail to pass the FCC examination for this license, after successfully completing one of these programs, you will receive a full refund of all tuition payments.

Completion of the Electronic Communications training program will prepare you for a Second Class Commercial Radio Telephone License. Should you fail to pass the FCC examination for this license, after successfully completing this program, you will receive a full refund of all tuition payments. This warranty is valid for the entire period of the completion time allowed for the course selected.



# Cleveland Institute of Electronics

1776 East 17th Street • Cleveland, Ohio 44114 • (216) 781-9400



June, 1966

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Staff Supervisor  
Ohio Bell Telephone Co.

Dear Friend:

How would you like to increase your income by \$150 a month?  
Donald N. Fosco did...and so can you!

This very moment, miracles of Electronics are changing the world you and I live in. New discoveries such as laser beams, magnetic tape, logic circuits, space travel and electronic robots are making this decade truly an "Electronics Era."

What does all this mean to you. It simply means that now is the ideal time to take advantage of the many exciting, high-pay jobs open to men who know Electronics. Over 1,000,000 (one million) men are urgently needed to fill openings as Electronics Technicians, Broadcast Engineers, Radio and TV Servicemen, Aerospace Engineers, Computer Specialists, etc..

Some time ago, you wrote and asked me for information about our electronics courses. How have you progressed since that day you received our CIE school catalog? Have you gone for months, maybe years, without a healthy raise in pay? Are you still interested in landing a better job with more money...say, \$150 more every month?

Let me tell you how three men increased their annual income up to \$3,000. Don, Gene and Tom all had two things in common:

1. They all realized that a career in Electronics offered them...EXCELLENT PAY...RAPID ADVANCEMENT...FUTURE SECURITY.
2. They also knew that the quickest way to land a good job in Electronics is to get a Government FCC License.

Let Don, Gene and Tom tell you, in their own words, how CIE helped them get an FCC License and a big hike in pay:

"Since taking the CIE course, I have received my First Class FCC License. Now I am a TV Broadcast Engineer and earn \$150 more a month." -- DONALD N. FOSCO, Rochester, New York

(continued on other side...)



"CIE helped me get my FCC License and also pass the entrance exam for my present job at North American Aviation. It pays \$228 a month more." -- EUGENE W. FROST, Columbus, Ohio

"I passed the FCC License exam before I finished the first part of the course. My income has jumped \$3,000 a year since I enrolled with CIE." -- THOMAS C. ARNOLD, Sulphur, Louisiana

Yes, once you hold an FCC License it's certified Government proof that you are qualified to operate and service transmitting equipment used in aviation, broadcasting, marine, microwave, and mobile communications. Employers prefer to hire licensed men. Many jobs must be filled by men who have an FCC Ticket.

CIE can help you get ahead quickly and economically. You learn at home, in your spare time, with new AUTO-PROGRAMMED lessons. It is the popular and effective way. We are the only electronics school in the United States that provides complete coverage of fundamentals...PLUS new 1966 lessons on: Logic Circuits, Digital Switching, Pulse Theory, Lasers, Single Sideband, Microminiaturization, etc.. See complete course descriptions in the enclosed booklet.

But there is one more important benefit. You get your Government FCC License ...or your money back! Our famous FCC License Warranty promises (in writing) that you will pass the FCC License exam, on the very first try, or CIE will refund all your tuition...no questions asked.

The FCC reports that 2 out of 3 men who took the 1st Class FCC License exam in 1965, failed. BUT, 9 out of 10 CIE men get their FCC License the very first time they try!

You can now SAVE up to \$40.00 on a CIE career course...and be eligible for our lifetime job placement service...if you enroll before June 30, 1966. How? Just fill out the enclosed Application For Enrollment and attach one Course Discount Stamp in the box as marked. Then send it to me with the correct payment in the postpaid air mail envelope.

You need not hesitate about sending in your enrollment. There is no risk on your part. If your first set of lessons do not convince you they can help you move ahead, you may return everything within 10 days for a full refund of your payment.

So drop your Application in the mail box today, won't you? Thanks a lot!

Very truly yours,



G. O. Allen  
President

P. S. To receive your tuition discount your Application must be postmarked before June 30, 1966. Why wait? Right now is an ideal time to get started.

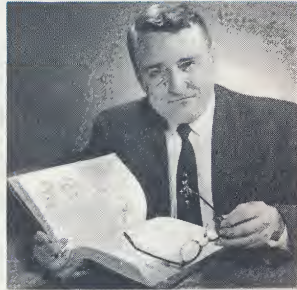




Opportunities in Electronics...



## Want to Get Ahead in Life?



CARL E. SMITH  
Founder and  
Electronics Consultant

Men who have the proper training find it easier to get ahead in life. You can quickly move up to a better job, with more pay, in Electronics. Here's how.

Look at the next page and see the great demand for Electronics Technicians . . . over one million technicians\* are needed today. Which area of Electronics interests you the most? Is it Radio and TV Broadcasting . . . Communications . . . Industrial Electronics . . . or do you want an FCC License?

Whichever it is, CIE has a course to help you master your career objective . . . quickly and economically. Next, turn to the following pages and get the complete details. You will find four new AUTO-PROGRAMMED courses from which to choose. Any one will teach you the necessary electronics theory you must know to be successful in electronics.

Then, read about our famous FCC License Warranty . . . our free LIFETIME employment service . . . and what CIE graduates have to report. When you are finished, ask yourself . . . what does the future hold for you? Your future is important, because the more you LEARN, the more you EARN.

\* Source: U. S. Dept. of Labor Handbook



# Help Wanted... Electronics

repair  
conduct-  
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of semicon-  
operational  
or design

APPLY  
MINENTAL  
ICE CORP.

515 S. CHADRON  
HAWTHORNE  
Equal opportunity employer

INICIANS



CVRO

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ing advantages.

APPLIED RESEARCH  
LABORATORIES, INC.

ELECTRONICS  
ELECTRONICS  
ELECTRONICS

\$300 TO \$650

JR. ENGINEER ..... \$650  
No degree required. Top electronic Co.  
Will handle initial design, packaging,  
and determine best mfg. methods.  
Fee paid.

SERVICE ENGR. .... \$600  
Relocate to Columbus. Knowledge of  
basic electricity and/or electronics. In-  
strument repair career with oppor-  
tunity to advance into sales.

TECHNICAL WRITER ..... \$600  
Top electronics Co. Excellent benefits.  
Will train writing.  
FIELD SERVICE TECHS ..... \$600  
Electromechanical solid state service  
and repair, high frequency, tape  
equipment and computers. Car fur-

nished.  
2-WAY MOBILE TECH ..... \$575  
Repair two-way mobile equipment.  
Prefer some experience. FCC license.

FIELD SERVICE ..... \$550  
Electronic service exp. preferred. Will  
work on nuclear devices and tape  
state. Car furnished. Fee paid.

SOLID STATE TECH ..... \$525  
Tech school plus some exp. for top  
work. Car Assist chief engineer in ad-  
vance circuit design, etc.

RESEARCH TECH ..... \$500  
Take schematics and build equipment.  
Prototype, order parts, pure research,  
wiring, etc.

RESEARCH TECH ..... \$500  
Take schematics and build equipment.  
Prototype, order parts, pure research,  
wiring, etc.

Mk. Bldg. A-2  
648-5880

AEROSPACE  
CORPORATION  
SERVICE.  
TECHNICIANS

Interstate Electronics Corpo-  
ration, a medium sized elec-  
tronic manufacturing firm in  
Orange County needs qual-  
ified technicians for its field  
service operation. DOES NOT  
REQUIRE CONSTANT TRAV-  
EL. IEC's operations are in  
three east coast ship yards.  
Personnel will be assigned to  
a location for a significant pe-  
riod of time.

DIGITAL  
INSTRUMENTATION

The equipment is modular-  
ized instrumentation for po-  
laris launching nuclear  
marine weapon system check-  
out.

REQUIREMENTS:

Thorough grounding  
in elec-  
tronics. Completion  
of technical school or  
industrial  
training in  
electronics  
for 6 months  
or more.

With 4-6 years of  
performing  
observations (surface, Mi-  
nition and maintenance of  
library experience acceptable.

ELECTRONIC  
TECHNICIANS

With 4 years in installation,  
repair and maintenance of  
electronic equipment through-  
out 4th echelon including master-  
classical gear.

Candidates send resumes immedi-  
ately to

BOX L-283, TIMES

An Equal Opportunity Employer

DATA PROCESSING  
SERVICE TRAINEE

OPENING FOR YOUNG MAN  
High school diploma, high mechani-  
cal aptitude, ELECTRONIC KNOW-  
LEDGE, neat appearance.

SCM CORP.

Data Processing Systems Div.  
Call for appointment  
8:30 a.m. to 10:30 a.m.  
Mr. Tom Dieterich 381-3311  
An equal opportunity employer

LABORATORY  
TECHNICIAN

with experience in high vacuum  
operation of microcircuitry pas-

RADIO TRANSMISSION  
RADIO FREQUENCY  
INTERFERENCE  
TROPIC-MICROWAVE  
WIRE OUTSIDE PLANT  
WIRE INSIDE PLANT  
TECHNICIANS

Applicants must be thoroughly  
trained and experienced in the  
maintenance of one or more of  
the following:

HEAVY GROUND RADAR  
GROUND COMMUNICATIONS  
NAVAIDS  
COMPUTERS (FSQ7 & 8)  
TROPOSCATTER  
ELECTRONIC TEST  
EQUIPMENT

TECHNICIAN

ELECTRONIC  
TECHNICIAN

Will trouble shoot and repair trans-  
istorized amplifier systems. Must  
be highly experienced in solid state.  
Should have strong theoretical back-  
ground in same.

Interviews 9 A.M.-2:30 P.M.  
STATHAM  
INSTRUMENTS, INC.

ELECTRONICS  
TEST LAB

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pulse exper-  
Send resume to  
Donald J. Kobcz

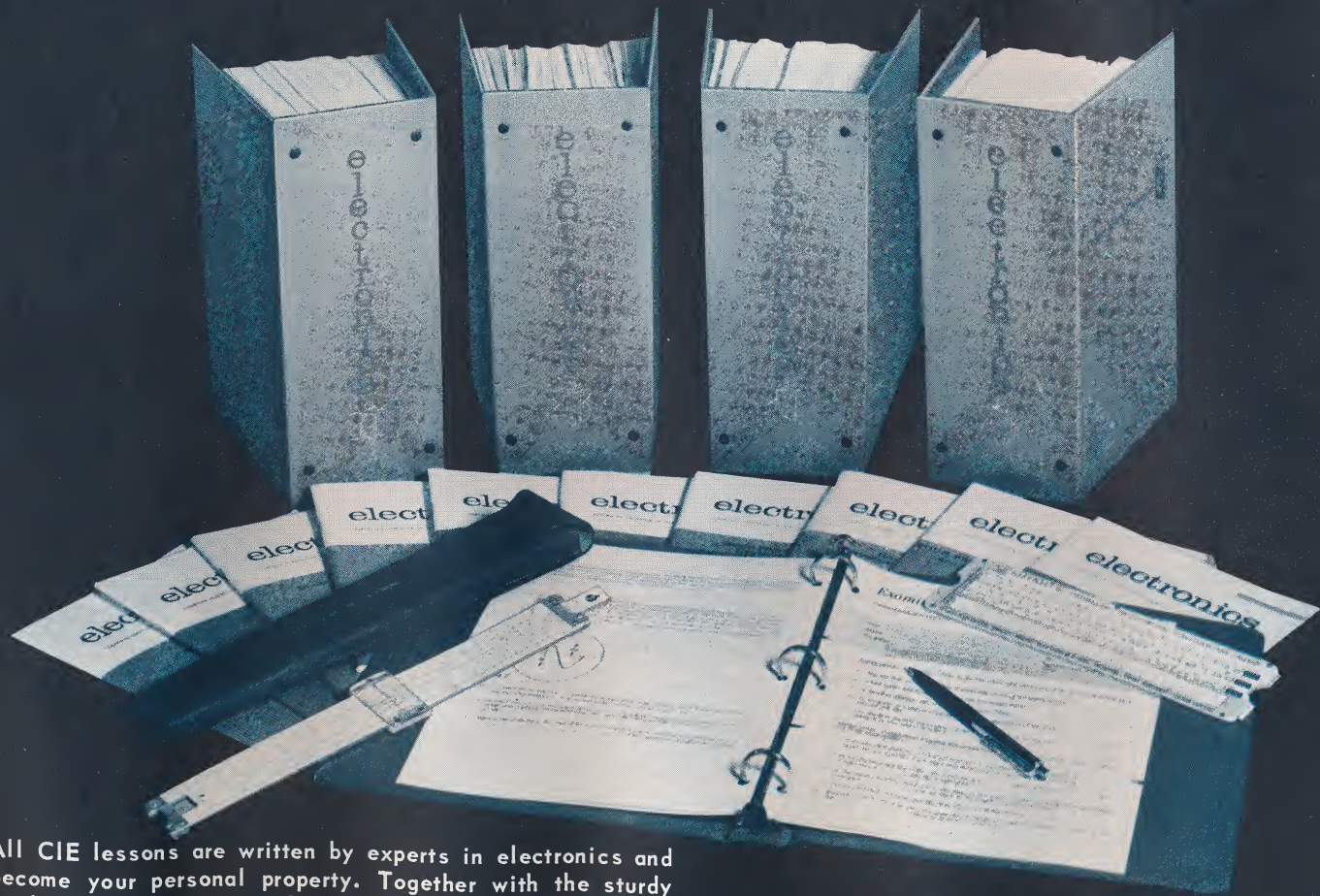
KORAD C  
A SUBSIDIARY  
Union Carbide

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Missile  
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All CIE lessons are written by experts in electronics and become your personal property. Together with the sturdy binders and Electronics Slide Rule (which are available to students) you will own an impressive library for life.



# Learn Electronics Quickly....

Cleveland Institute is using a new concept called "programmed learning." You can now learn all about electronics by this quick and easy method. In fact, it's so simple and interesting that it's actually fun. AUTO-PROGRAMMED\* lessons provide you with direct assistance to acquire the facts, concepts, and skills you need to know.

**NEW**  
in  
**1966**

Only CIE offers new, up-to-the-minute lessons in all of these subjects:

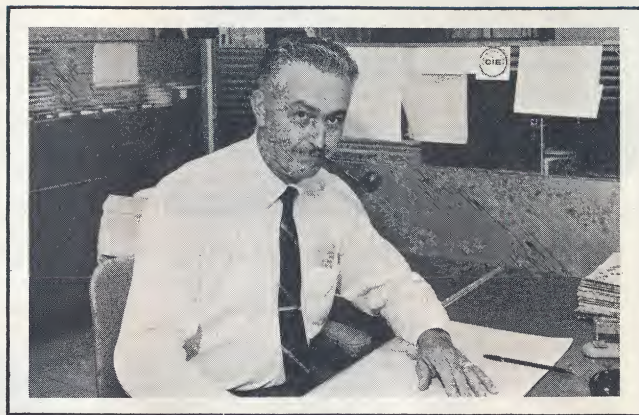
- Logical Troubleshooting
- Laser Theory and Application
- Microminiaturization
- Single Sideband Techniques
- Pulse Theory and Application
- Boolean Algebra

CIE has four NEW and up-to-date home study courses:

- Electronics Technology
- Broadcast Engineering
- First Class FCC License
- Electronic Communications

Whichever you select, you can be sure that you will receive technical training of the highest quality.

\* Trademark



Your instructor is always anxious to give you all the personal help you need. He is a qualified, experienced teacher who will guide you through your lessons.

Your exams will be graded by your instructor the same day they are received and returned to you promptly. If you have any questions or desire further help he will personally reply in detail.





## Electronics Technology

Top jobs in electronics are held by men who are skilled in electronics theory *and* hold a 1st Class FCC License. This comprehensive program will do *both* for you. You will learn how to apply the principles of electronics in understanding, analyzing, and troubleshooting all types of electronic equipment... whether in industry, business, government, or the military. Upon completion you will receive a CIE diploma and the "warranty" of passing the 1st Class FCC License examination with Radar Endorsement... or we refund all tuition payments. Truly, our most popular training program.

### COURSE CONTENTS: 66 AUTO-PROGRAMMED lessons

- Electrons in Action – Part I
- Electrons in Action – Part II
- Putting Formulas to Work
- Direct-Current Circuits
- Roots, Proportion and Negative Numbers
- Inductance and Capacitance
- \* Tracing Through Decision-Making Circuits
- Easy Ways of Figuring Electronic Problems
- Alternating-Current Circuits
- How Tubes and Transistors Amplify
- Your Progress Review . . .*
- and FCC License Check – Part I*
- Operation of Tubes and Transistors
- \* Simplifying Circuit Analysis Using Kirchhoff's Laws
- Resonant Circuits
- Amplifier Circuitry
- \* NEW Lesson**

- Audio Amplifiers and Equipment
- Using Semiconductor Diodes
- Operation of Semiconductor Devices
- Radio Frequency Amplifiers
- Oscillators
- How to Work with Transistors
- Your Progress Review . . .*
- and FCC License Check – Part II*
- Theory of Power Supplies
- Modern Modulation Methods
- Detection and Frequency Conversion
- Frequency and Phase Modulation
- \* Lasers in Communications and Industry
- Measuring and Measuring Instruments
- Systematic Troubleshooting
- Transmission Lines and Wave Guides



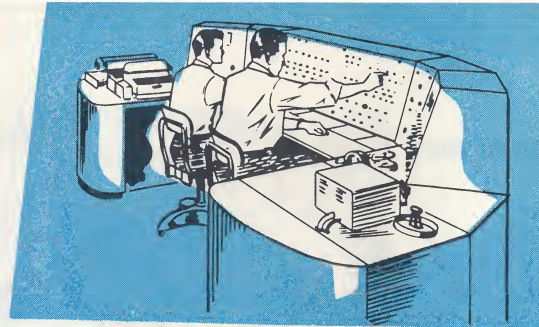
*Your Progress Review . . .  
and FCC License Check—Part III & V*  
Antennas and Wave Propagation  
Receiving Equipment  
Transmitters

- \* Suppressed Carrier Modulation and  
Single Sideband Transmission
- Batteries, Control Motors, and other Power Sources
- Understanding and Using the Oscilloscope
- Installing, Troubleshooting, and Maintaining  
Two-Way Mobile Equipment—Part I
- Installing, Troubleshooting, and Maintaining  
Two-Way Mobile Equipment—Part II

*Your Progress Review . . . and FCC  
License Check—Part IV. (You are now  
ready for your 2nd Class FCC License Exam)*

Microwave Communication Systems  
Regulated Power Supplies  
Algebra  
Logarithms  
Decibels  
Advanced Troubleshooting Techniques  
Trigonometry  
A-C Circuit Mathematics  
Circuit Analysis  
Proper Use of Transistors  
Bias Stabilization of Transistor Circuits

- \* Digital Switching Units



- \* Binary Coding and Computer Arithmetic
- \* Logic Circuit Tracing Using Boolean Algebra
- \* Pulse Processing Circuits
- \* Circuit Response to Non-Sinusoidal Waveforms
- \* Clippers, Clampers, and Binaries
- \* Pulse and Timebase Generators
- Microminiaturization
- Monochrome and Color Television
- Radar

*Your Progress Review . . . and FCC  
License Check—Part VI. (You are now  
ready for your 1st Class FCC License Exam)*

Measuring Techniques  
Magnetic Amplifiers  
Analog Computers  
Understanding and Using Industrial Control Devices  
Servomechanisms and Components  
Servosystems  
Sensing Devices and Transducers  
Telemetry  
Aviation Electronics  
*Your Progress Review*





## Broadcast Engineering

Do you have your heart set on a career in broadcasting . . . perhaps as "chief engineer" of a prominent Radio or TV station? Your wishes can come true by enrolling in this specialized program on the selection, proper use, and maintenance of broadcasting station equipment. We "warrant" that upon completion of this course you will successfully pass the 1st Class FCC License examination . . . or your money back in full. This license is a requirement for obtaining the better engineering positions at all broadcasting stations. An excellent future awaits the graduate of this most interesting career program.

### COURSE CONTENTS:

#### 64 AUTO-PROGRAMMED lessons

Electrons in Action – Part I  
Electrons in Action – Part II  
Putting Formulas to Work  
Direct-Current Circuits  
Roots, Proportion and Negative Numbers  
\* Inductance and Capacitance  
Tracing Through Decision-Making Circuits  
Easy Ways of Figuring Electronic Problems  
Alternating-Current Circuits  
How Tubes and Transistors Amplify  
*Your Progress Review . . .*  
*and FCC License Check – Part I*

#### \* NEW Lesson

\* Operation of Tubes and Transistors  
Simplifying Circuit Analysis Using Kirchhoff's Laws  
Resonant Circuits  
Amplifier Circuitry  
Audio Amplifiers and Equipment  
Using Semiconductor Diodes  
Operation of Semiconductor Devices  
Radio Frequency Amplifiers  
Oscillators  
How to Work with Transistors  
*Your Progress Review . . .*  
*and FCC License Check – Part II*



Theory of Power Supplies  
Modern Modulation Methods  
Detection and Frequency Conversion  
Frequency and Phase Modulation  
Measuring and Measuring Instruments  
Systematic Troubleshooting  
Transmission Lines and Wave Guides  
*Your Progress Review . . .*  
*and FCC License Check – Part III & V*  
Antennas and Wave Propagation  
Receiving Equipment  
Transmitters  
Suppressed Carrier Modulation and  
Single Sideband Transmission  
Batteries, Control Motors, and other Power Sources  
Understanding and Using the Oscilloscope  
Installing, Troubleshooting, and Maintaining  
Two-Way Mobile Equipment – Part I  
Installing, Troubleshooting, and Maintaining  
Two-Way Mobile Equipment – Part II

*Your Progress Review . . . and FCC  
License Check – Part IV. (You are now  
ready for your 2nd Class FCC License Exam)*

Microwave Communication Systems  
Regulated Power Supplies  
Algebra  
Logarithms  
Decibels

Advanced Troubleshooting Techniques  
Trigonometry

A-C Circuit Mathematics

Circuit Analysis

Proper Use of Transistors

Bias Stabilization of Transistor Circuits

\* Circuit Response to Non-Sinusoidal Waveforms

\* Clippers, Clampers, and Binaries

\* Pulse and Timebase Generators

The Radio Broadcast Station

Sound and the Human Ear

Studios and Microphones

Attenuators and Mixers

Audio Amplifiers and Loud Speakers

Transcription Equipment

Record Reproduction Equipment

Monochrome and Color Television

Program Transmission Facilities

Transmitter Program Equipment

Standard Broadcast Transmitters

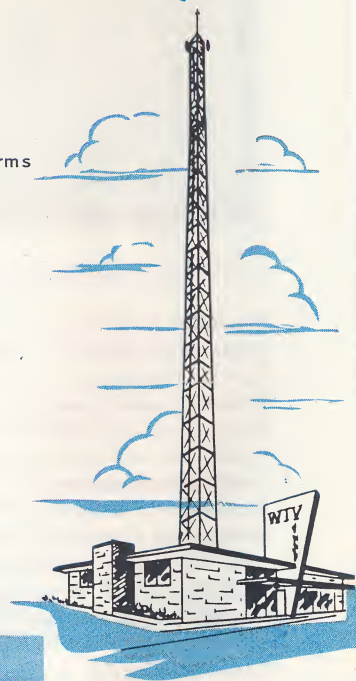
FM Broadcast Transmitters

AM and FM Transmitting Antennas

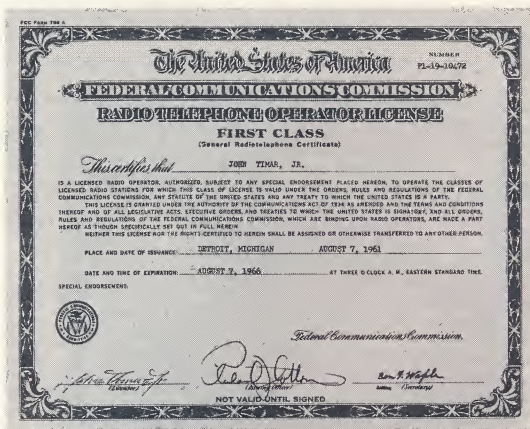
Directional Antennas

Broadcast Rules and Regulations

*Your Progress Review . . . and FCC  
License Check – Part VI. (You are now  
ready for your 1st Class FCC License Exam)*







## First Class FCC License

Is the lack of an FCC License preventing you from getting a better job? If you do not have that valuable FCC ticket, this specialized program will do the trick *quickly*. It is designed for men who want to operate and service transmitting equipment used in aviation, broadcasting, marine, microwave, mobile communications, or Citizens-Band. Successful completion of this course will enable you to pass the 1st Class FCC examination . . . *on the very first try* . . . or we refund all tuition payments.

### COURSE CONTENTS: 36 AUTO-PROGRAMMED lessons

- Electrons in Action – Part I
- Electrons in Action – Part II
- Putting Formulas to Work
- Direct-Current Circuits
- Roots, Proportion and Negative Numbers
- Inductance and Capacitance
- \* Tracing Through Decision-Making Circuits
- Easy Ways of Figuring Electronic Problems
- Alternating-Current Circuits
- How Tubes and Transistors Amplify
- Your Progress Review . . .*
- and FCC License Check – Part I*
- Operation of Tubes and Transistors
- Resonant Circuits
- Amplifier Circuitry
- Audio Amplifiers and Equipment
- \* **NEW Lesson**

- Using Semiconductor Diodes
- Operation of Semiconductor Devices
- Radio Frequency Amplifiers
- Oscillators
- Your Progress Review . . .*
- and FCC License Check – Part II*
- Theory of Power Supplies
- Modern Modulation Methods
- Detection and Frequency Conversion
- Frequency and Phase Modulation
- Measuring and Measuring Instruments
- Transmission Lines and Wave Guides
- Your Progress Review . . .*
- and FCC License Check – Part III & V*
- Antennas and Wave Propagation
- Receiving Equipment

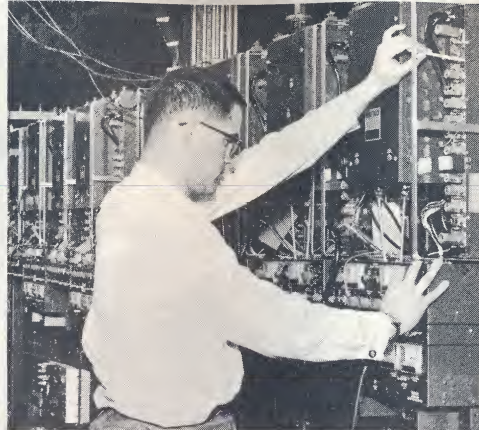
- Transmitters
- \* Suppressed Carrier Modulation and Single Sideband Transmission
- Batteries, Control Motors, Power Sources

*Your Progress Review . . . and FCC License Check – Part IV. (You are now ready for your 2nd Class FCC License Exam)*

- Algebra
- Logarithms
- Decibels
- Trigonometry
- A-C Circuit Mathematics
- Circuit Analysis
- Monochrome and Color Television

*Your Progress Review . . . and FCC License Check – Part VI. (You are now ready for your 1st Class FCC License Exam)*





## Electronic Communications (Second-class FCC License)

If communications is your specialty and a 2nd Class FCC License your goal, this "compact" training program will get you on target. You will receive instructions in troubleshooting, repair, and maintenance of equipment used for voice communications by means of radio-frequency waves. The 2nd Class FCC License is "assured" if you complete the course . . . or we pay the tuition. A fine course of study highly recommended for jobs with telephone companies, railroads, pipelines, etc.

### COURSE CONTENTS: 39 AUTO-PROGRAMMED lessons

Electrons in Action – Part I  
Electrons in Action – Part II  
Putting Formulas to Work  
Direct - Current Circuits  
Roots, Proportion and Negative Numbers  
Inductance and Capacitance

\* Tracing Through Decision-Making Circuits  
Easy Ways of Figuring Electronic Problems  
Alternating - Current Circuits  
How Tubes and Transistors Amplify  
*Your Progress Review . . .*

*and FCC License Check – Part I*  
Operation of Tubes and Transistors

\* Simplifying Circuit Analysis Using Kirchhoff's Laws  
Resonant Circuits  
Amplifier Circuitry  
Audio Amplifiers and Equipment

\* NEW Lesson

Using Semiconductor Diodes  
Operation of Semiconductor Devices  
Radio Frequency Amplifiers  
Oscillators

How to Work with Transistors  
*Your Progress Review . . .*  
*and FCC License Check – Part II*

Theory of Power Supplies  
Modern Modulation Methods  
Detection and Frequency Conversion  
Frequency and Phase Modulation

\* Lasers in Communications and Industry  
Measuring and Measuring Instruments  
Systematic Troubleshooting  
Transmission Lines and Wave Guides  
*Your Progress Review . . .*

*and FCC License Check – Part III & V*

Antennas and Wave Propagation  
Receiving Equipment  
Transmitters

\* Suppressed Carrier Modulation and  
Single Sideband Transmission  
Batteries, Control Motors, Power Sources  
Understanding and Using  
the Oscilloscope

Installing, Troubleshooting, & Maintaining  
Two-Way Mobile Equipment – Part I  
Installing, Troubleshooting, & Maintaining  
Two-Way Mobile Equipment – Part II

*Your Progress Review . . . and FCC  
License Check – Part IV. (You are now  
ready for your 2nd Class FCC License Exam)*

Microwave Communication Systems  
Regulated Power Supplies  
Advanced Troubleshooting Techniques



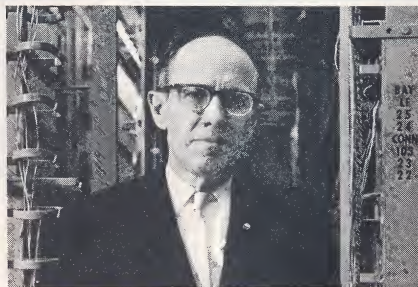
## Employers Select CIE....



**Mr. W. E. Fuhr, Asst. Ch. Eng., Chicago, Milwaukee, St. Paul & Pac. R.R.**

"Our Company has developed a continuing program for up-grading technician skills to the highest level possible. And because electronics is such an integral part of our communications system, we have given this area particular training emphasis.

"To a large extent, we depend on CIE Home Study for basic electronics training. It is an effective and practical way to provide electronics training for our employees. The men enrolled in the program are enthusiastic and so is the Company. It has turned out to be an ideal solution to our electronics training problem."



**Mr. Kenneth L. Dally, V.P., Central and Associated Telephone Companies**

"The Telephonic Industry is particularly affected by the constantly increasing need for electronics technicians. In our Company we recognize that almost all of our plant personnel must know something about electronic theory and principles.

"After long and careful consideration, we chose a CIE Home Study course for our training. To date, some 270 of our employees are completing this course at a highly satisfactory rate. Any employee, almost regardless of educational background, age, or position can, if he wants to, learn electronics through home study."



**Mr. Calvin E. Cooley, Director of Training, Cessna Aircraft Company**

"It's imperative that all of our dealers' maintenance personnel have a practical understanding of basic electronics. To meet this need we have developed an electronics training program for Cessna dealers' service men.

"One of the more important elements of this program is the Cleveland Institute Home Study course in electronics. It is designed to give each man a firm grasp of electronic theory. We selected the CIE course only after careful study of many other electronics training programs."



## Lifetime Job Service....

Many schools have an employment service of some type for its graduates. A few schools offer job service to students as they near completion. No school exceeds the employment service available to students & graduates of Cleveland Institute.

Every 60 days each student receives a copy of the New Job Opportunities bulletin listing hundreds of job openings. As soon as you become a CIE student you are entitled to this service. All graduates of CIE are eligible for LIFETIME job placement service.

But, that is only a part of our program. For graduates we offer a service that is unequalled. We will prepare and print 200 resumes of your background. Yes, 200 resumes written by personnel who know how to present your qualifications to prospective employers.

Whether you want a job requiring an FCC license or one of the thousands of jobs where employers request a license holder . . . we will train you for the job and then help you get it.

Many Cleveland Institute students and graduates hold jobs with leading companies such as:

|                                       |                                         |
|---------------------------------------|-----------------------------------------|
| American Telephone & Telegraph Co.    | International Telephone & Telegraph Co. |
| Atomic Energy of Canada               | Lockheed Missile & Space Co.            |
| Avco Corporation                      | The Martin Company                      |
| Bell Telephone System                 | McDonnell Aircraft                      |
| Bendix Corporation                    | Motorola, Inc.                          |
| Boeing Company                        | National Cash Register                  |
| California Water & Telephone Co.      | North American Aviation, Inc.           |
| Collins Radio Company                 | Pennsylvania Railroad                   |
| Douglas Aircraft Co.                  | Philco Corp.                            |
| E. I. DuPont de Nemours               | Radio Corporation of America            |
| Eastern Airlines                      | Raytheon Company                        |
| Federal Electric Corp.                | Republic Aviation                       |
| General Dynamics Astronautics         | Republic Steel Co.                      |
| General Electric Co.                  | Sperry-Rand, Univac Division            |
| General Instrument Corp.              | Stewart-Warner Corporation              |
| General Motors Corp.                  | Sylvania Electric Products              |
| General Telephone & Electronics Corp. | United Telephone Co.                    |
| Grumman Aircraft                      | West Coast Telephone Co.                |
| Gulf Communications Co., Inc.         | Western Electric Co.                    |
| Hughes Aircraft Corp.                 | Western Union Telegraph Co.             |
| IBM                                   | Westinghouse Electric & Mfg. Co.        |



# Does CIE training pay off?

## TV Broadcast Engineer earns \$150 more a month

"Since taking your course, I have received my First-Class FCC License. Now I am a TV Broadcast Engineer."

*Donald N. Fosco, Rochester, New York*

## My income has jumped \$3,000 a year

"My CIE course was so helpful that my annual income has jumped \$3,000. I passed my FCC First-Class License exam before I finished the first part of the course."

*Thomas C. Arnold, Sulphur, Louisiana*

## Passed FCC License exam... lands new job

"I know that you will be pleased to learn that I received my FCC License and am working with the Pacific Tel. & Tel. in their Mobile Div. I tried to get this job for over a year, but the license did the trick."

*Calvin Smith, Salinas, California*

## CIE grad doubled his previous income

"I obtained my present position as a technical writer for General Dynamics as a direct result of your excellent letter of recommendation and resume. Although I was already 52 years old, my increase in salary since taking your course has more than doubled my previous income."

*Howard A. Harvey, Coventry, Rhode Island*

## Wins new job and \$228 raise in pay

"These CIE courses are wonderful! I like the way they're written. They're easy to understand and well presented. Without CIE training I could not have passed the entrance exam for my present job, which pays \$228 a month more."

*Eugene W. Frost, Columbus, Ohio*

## Student gets good job with RCA

"Thanks to Cleveland Institute of Electronics I got a good

job with RCA Service Co... I've been in radio and TV repair for the past 10 years, but my knowledge of electronics was hazy before I took your electronics course."

*James B. McCollough, Ossining, New York*

## Gets two raises at Bell Telephone Co.

"Since getting my 2nd Class FCC License, I have received a much better job with Bell Telephone Company. In addition to two raises in pay in six months, I have been attending our company school on teletype, data speed, and mobile telephone."

*Carl H. Lawson, Spartanburg, South Carolina*

## Top paid technician with Collins Radio

"I have just been released from the Navy and I picked the job which I liked best; which is with Collins Radio Co. My CIE course really prepared me for their technical employment test and the FCC License Exam which I also passed. I'm now one of their top paid electronics test technicians."

*Robert H. Paulsen, Cedar Rapids, Iowa*

## Promoted to Senior Engineer... credits CIE

"I am happy to report that I received a promotion to Senior Designer and a raise (first in three months) of \$47.70 a month. I feel that this was prompted by taking your electronics course."

*John V. Vargovic, Barberton, Ohio*

## Customer Engineer at IBM moves ahead

"I sincerely believe the knowledge I received through your home study electronics course has had a direct bearing on the progress I've made at IBM. I'd recommend a CIE electronics course to anyone who wants to get ahead in electronics."

*Dan J. Daly, Montgomery, Alabama*



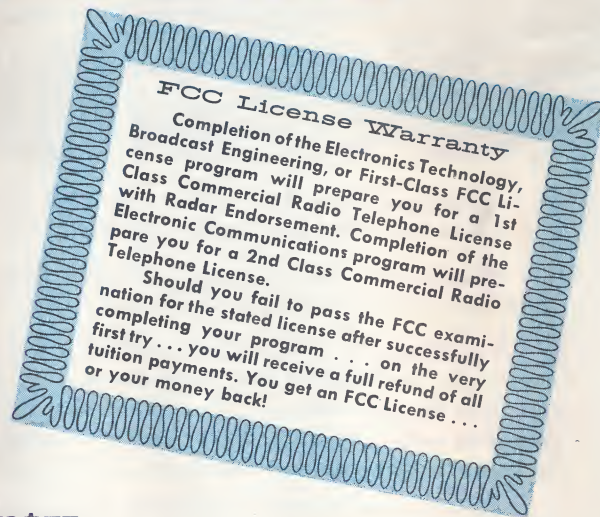
# Satisfaction-Warranty....

TEN good reasons why you should select Cleveland Institute to help you to move ahead in Electronics . . .

1. Accredited by the Accrediting Commission of the National Home Study Council, Washington, D.C.
2. Approved by the Ohio State Department of Education
3. Business member of the Chamber of Commerce of the United States of America
4. Up-to-date AUTO-PROGRAMMED lesson material written by leading authors in electronics
5. Consultation on special complex problems for all students at no extra cost
6. CIE Employment Placement Service for all students and graduates
7. Present student body of over 15,500
8. Over 80,000 students enrolled since 1950
9. 10-day money back warranty
10. An FCC License . . . or Your Money Back

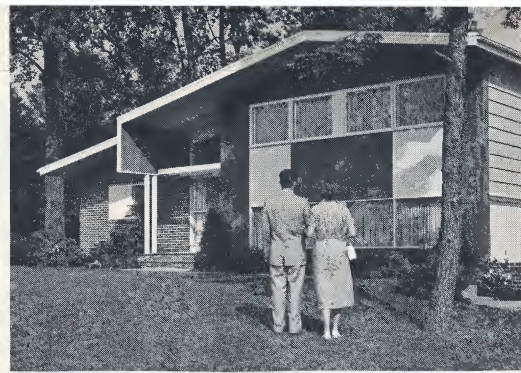
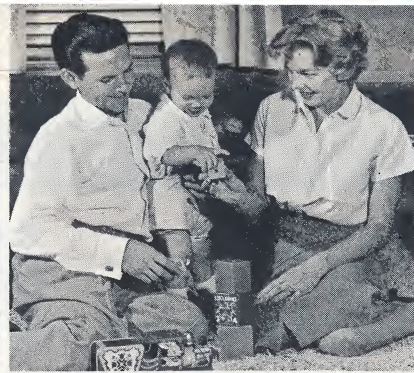
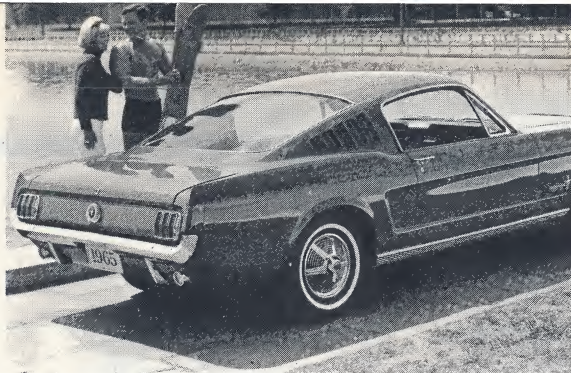
## 10 day money back Warranty....

We want you to see and actually use the first shipment of ten lessons. Examine them thoroughly . . . see how easy they are to understand. Yes, you can even work as many lessons as you like . . . without any obligation. You have ten full days to make up your mind.



If you aren't satisfied that you have enrolled in the finest electronics training program best suited to prepare you for success, you can get all your money back. Simply return the used material and we will promptly refund your tuition in full.





**A**RE you ready for a better job? This may sound like a silly question, but many men are actually not ready. They are forever waiting for some “lucky break.”

Chances are that their magic day will never come. Only those who take the initiative and actually do something about their future will advance to a better job . . . with more pay, more opportunity, more security.

You have read this booklet and learned that the field of Electronics is booming . . . and that skilled Electronic Technicians will be in demand for years to come. If you are not already employed in Electronics, now is your chance to get in on the ground floor . . . there's plenty of room at the top. If you are presently employed in the field, here is a golden opportunity to gain valuable additional knowledge . . . new techniques that you can put to use on the job.

Every single member of the CIE faculty will do everything possible to help you each step of the way. CIE is dedicated to teach you all you desire to learn while you are a student . . . and to further your electronics interest throughout your future career. Will you give us the opportunity to help you advance?

“He is not only idle who does nothing, but he is idle who may be better employed.” — Socrates. So get started now! Pick a CAREER . . . pick a COURSE . . . pick CIE. Send your Application For Enrollment today to:



**Cleveland Institute of Electronics**

1776 East 17th Street • Cleveland, Ohio 44114



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Cleveland, Ohio 44114

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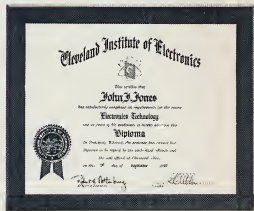
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# HOW CIE HELPS YOU GET A BETTER JOB

1

## You get proof of your electronics training

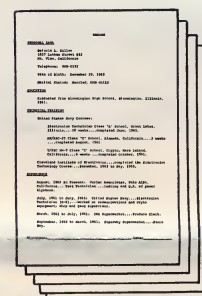
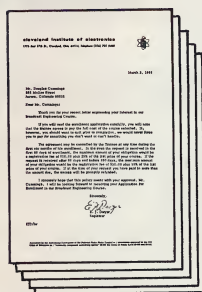


Upon completion of the CIE training program you select, you will be awarded the Institute's Diploma inscribed with your name in recognition of your accomplishment. This document is widely respected by employers everywhere as proof of the thoroughness of your training and the sincerity of your desire to get ahead.

In addition, if you complete one of the four programs that prepare you to pass a Commercial FCC License (1st or 2nd Class) exam, you are assured by our money-back Warranty that you will receive your FCC License. This is certification by the United States Government that you are qualified for many different challenging assignments in the Electronics field.

2

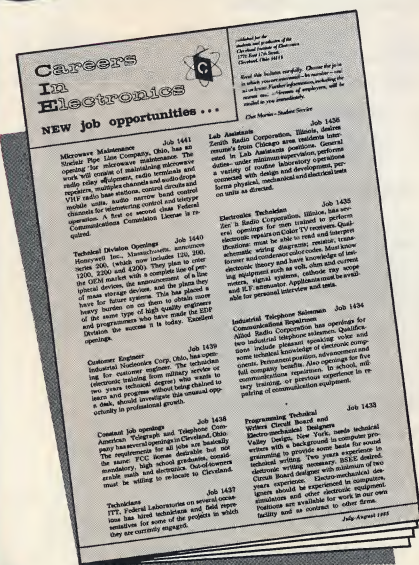
## You get 200 "RESUMES" and letters of recommendation



How do you apply for a good job when you can't appear in person? For CIE graduates, it's easy. We have experts who know how to present your qualifications to prospective employers. They will prepare a clear, concise "resume" summing up your background and qualifications and spotlighting your strong points. Then we print up 200 copies for you. Also, we'll write, and print up 200 copies of our own letter of recommendation, telling prospective employers why we think you're well qualified. There is no extra charge for this service. Then you don't have to worry so much about how to write a letter of application. Just a brief note and these two enclosures make a fine, impressive application.

3

## You get a bi-monthly bulletin listing new job opportunities



This is sent to every student and graduate and describes a wide variety of Electronics job opportunities for which we believe our students are qualified. You simply notify your Student Service Counsellor which jobs interest you. Additional information, including the names and addresses of the employers, is then promptly sent to you.

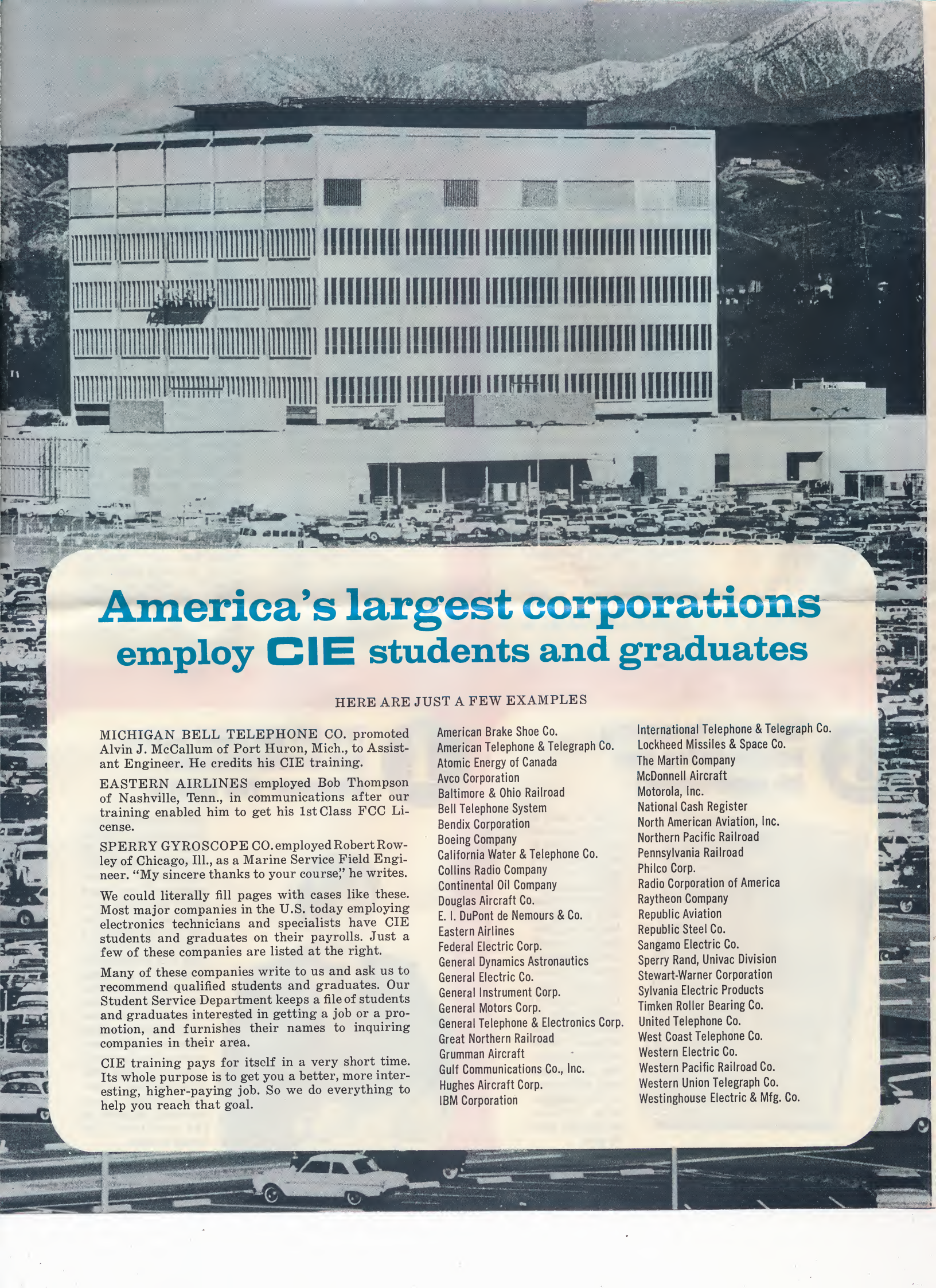
4

## You get personal advice and encouragement whenever you need it



Our Student Service Department stands ready at all times to provide you with any advice and encouragement you may need, not only concerning your lessons but also on getting a better job. They'll help you decide what kinds of job openings to watch for and answer any questions you may have on how to apply for them. The Director of Student Service has an individual file filled with information about you, and takes a keen personal interest in the problems you bring to him.





# America's largest corporations employ **CIE** students and graduates

## HERE ARE JUST A FEW EXAMPLES

**MICHIGAN BELL TELEPHONE CO.** promoted Alvin J. McCallum of Port Huron, Mich., to Assistant Engineer. He credits his CIE training.

**EASTERN AIRLINES** employed Bob Thompson of Nashville, Tenn., in communications after our training enabled him to get his 1st Class FCC License.

**SPERRY GYROSCOPE CO.** employed Robert Rowley of Chicago, Ill., as a Marine Service Field Engineer. "My sincere thanks to your course," he writes.

We could literally fill pages with cases like these. Most major companies in the U.S. today employing electronics technicians and specialists have CIE students and graduates on their payrolls. Just a few of these companies are listed at the right.

Many of these companies write to us and ask us to recommend qualified students and graduates. Our Student Service Department keeps a file of students and graduates interested in getting a job or a promotion, and furnishes their names to inquiring companies in their area.

CIE training pays for itself in a very short time. Its whole purpose is to get you a better, more interesting, higher-paying job. So we do everything to help you reach that goal.

American Brake Shoe Co.  
American Telephone & Telegraph Co.  
Atomic Energy of Canada  
Avco Corporation  
Baltimore & Ohio Railroad  
Bell Telephone System  
Bendix Corporation  
Boeing Company  
California Water & Telephone Co.  
Collins Radio Company  
Continental Oil Company  
Douglas Aircraft Co.  
E. I. DuPont de Nemours & Co.  
Eastern Airlines  
Federal Electric Corp.  
General Dynamics Astronautics  
General Electric Co.  
General Instrument Corp.  
General Motors Corp.  
General Telephone & Electronics Corp.  
Great Northern Railroad  
Grumman Aircraft  
Gulf Communications Co., Inc.  
Hughes Aircraft Corp.  
IBM Corporation

International Telephone & Telegraph Co.  
Lockheed Missiles & Space Co.  
The Martin Company  
McDonnell Aircraft  
Motorola, Inc.  
National Cash Register  
North American Aviation, Inc.  
Northern Pacific Railroad  
Pennsylvania Railroad  
Philco Corp.  
Radio Corporation of America  
Raytheon Company  
Republic Aviation  
Republic Steel Co.  
Sangamo Electric Co.  
Sperry Rand, Univac Division  
Stewart-Warner Corporation  
Sylvania Electric Products  
Timken Roller Bearing Co.  
United Telephone Co.  
West Coast Telephone Co.  
Western Electric Co.  
Western Pacific Railroad Co.  
Western Union Telegraph Co.  
Westinghouse Electric & Mfg. Co.



# You can earn more money if you have an FCC License

FCC FORM 758 A

*The United States of America*

NUMBER  
P1-20-6490

**FEDERAL COMMUNICATIONS COMMISSION**

**RADIO TELEPHONE OPERATOR LICENSE**

**FIRST CLASS**  
(General Radiotelephone Certificate)

*This certifies that* TOMMY WILLIS DUFFY

IS A LICENSED RADIO OPERATOR, AUTHORIZED, SUBJECT TO ANY SPECIAL ENDORSEMENT PLACED HEREON, TO OPERATE THE CLASSES OF LICENSED RADIO STATIONS FOR WHICH THIS CLASS OF LICENSE IS VALID UNDER THE ORDERS, RULES AND REGULATIONS OF THE FEDERAL COMMUNICATIONS COMMISSION, ANY STATUTE OF THE UNITED STATES AND ANY TREATY TO WHICH THE UNITED STATES IS A PARTY.

THIS LICENSE IS GRANTED UNDER THE AUTHORITY OF THE COMMUNICATIONS ACT OF 1934 AS AMENDED, AND THE TERMS AND CONDITIONS THEREOF AND OF ALL LEGISLATIVE ACTS, EXECUTIVE ORDERS, AND TREATIES TO WHICH THE UNITED STATES IS SIGNATORY, AND ALL ORDERS, RULES AND REGULATIONS OF THE FEDERAL COMMUNICATIONS COMMISSION, WHICH ARE BINDING UPON RADIO OPERATORS, ARE MADE A PART HEREOF AS THOUGH SPECIFICALLY SET OUT IN FULL HEREIN.

NEITHER THIS LICENSE NOR THE RIGHTS CERTIFIED TO HEREIN SHALL BE ASSIGNED OR OTHERWISE TRANSFERRED TO ANY OTHER PERSON.

PLACE AND DATE OF ISSUANCE: BUFFALO, NEW YORK SEPTEMBER 11, 1963

DATE AND TIME OF EXPIRATION: SEPTEMBER 11, 1968 AT THREE O'CLOCK A. M., EASTERN STANDARD TIME.

SPECIAL ENDORSEMENT: SHIP RADAR ENDORSEMENT - SEPTEMBER 11, 1963 - BUFFALO, NEW YORK

 *[Signature]*  
ISSUING OFFICER

*Federal Communications Commission*

*Tommy Willis Duffy* (Licensee) *[Signature]* (Issuing Officer) *Ron F. Waples* (Secretary)

NOT VALID UNTIL SIGNED

## Employers are paying good money for men holding FCC tickets. Read how to get yours:

When you hold a Commercial License issued by the FCC (Federal Communications Commission) you have written proof that you know and understand basic electronic theory and fundamentals. It's worth plenty... particularly to companies on the lookout for qualified electronics technicians. Here's how one of the country's leading office machine manufacturers rates men with FCC Licenses:

"An FCC License is an asset to any man looking to enhance his career in the field of electronics. At our Company, a licensed man is well-rewarded because an FCC License attests to his knowledge of electronics theory..."

Thousands of employers will tell you the same thing. Licensed men get the good jobs. They make more money... move ahead faster... enjoy exciting, challenging work. What's more, they're needed badly in every field of electronics. Industrial electronics. Radio-TV Broadcasting. Aerospace. Electronics Servicing... including mobile and marine radio *plus* CB.

Yes... your opportunities are unlimited once you're carrying that

FCC Commercial Ticket. AND CLEVELAND INSTITUTE OF ELECTRONICS CAN GET ONE FOR YOU! On the next page, read how four ambitious men just like you have cashed in on CIE's sure-fire FCC Licensing Program. Read about CIE's exclusive money-back offer. And then enroll in the FCC course of your choice. You will soon be on *your* way to a Commercial FCC License and the many rewards that go with it!

**NEW**  
in  
**1966**

Only CIE offers new, up-to-the-minute lessons in all of these subjects:

- Logical Troubleshooting
- Laser Theory and Application
- Microminiaturization
- Single Sideband Techniques
- Pulse Theory and Application
- Boolean Algebra



# These CIE men have good jobs

(they have Commercial FCC Licenses)



**Matt Stuczynski, Senior Transmitter Operator, Radio Station WBOE.** "I give Cleveland Institute credit for my First Class Commercial FCC License. Even though I had only 6 weeks of high school algebra, CIE's AUTO-PROGRAMMING teaching method makes electronics theory and fundamentals easy. After completing the CIE course, I took and passed the 1st Class Exam. I now have a good job in studio operation, transmitting, proof of performance, equipment servicing. Believe me, CIE lives up to its promises!"



**Ted Barger, Electronic Technician, Smith Electronics Co.** "I've been interested in electronics ever since I started operating my own Ham rig (K8ANF). But now I've turned a hobby into a real interesting career. Cleveland Institute of Electronics prepared me for my Commercial FCC License exam . . . and I passed it on the first try. I'm now designing, building and testing all kinds of electronic equipment . . . do a lot of traveling, too. It's a great job . . . and thanks to CIE and my FCC License, I'm on my way up."



**Chuck Hawkins, Chief Radio Technician, Division 12, Ohio Dept. of Highways.** "Cleveland Institute Training enabled me to pass *both* the 2nd and 1st Class License Exams on my *first* attempt . . . even though I'd had no other electronics training. (Many of the others who took the exam with me were trying to pass for the eighth or ninth time!) I'm now in charge of Division Communications and we service 119 mobile units and six base stations. It's an interesting, challenging and extremely rewarding job. And incidentally, I got it through CIE's Job Placement Service . . . a free lifetime service for CIE graduates."



**Glenn Horning, Local Equipment Supervisor, Western Reserve Telephone Company (subsidiary of Mid-Continent Telephone Company).** "There's no doubt about it. I owe my 2nd Class FCC License to Cleveland Institute. Their FCC License Program really teaches you theory and fundamentals and is particularly strong on transistors, mobile radio, troubleshooting and math. Do I use this knowledge? You bet. We're installing more sophisticated electronic gear all the time and what I learned from CIE sure helps. Our Company has 10 other men enrolled with CIE and take my word for it, it's going to help every one of them just like it helped me."

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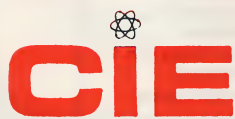
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